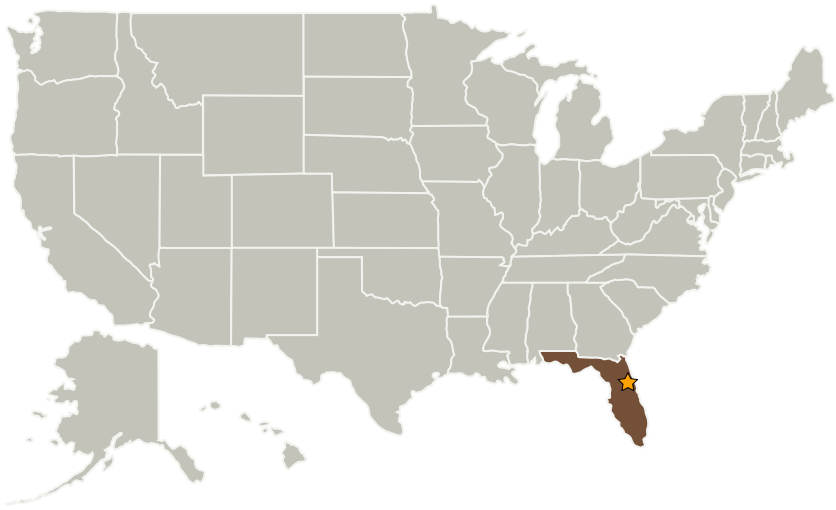
High Temperature Sound Absorption Coating - Soundown HT, Phase I

Completed Technology Project (2004 - 2005)

Project Introduction

MPAC and UMR are proposing development of an Acoustic Control System for high temperature gas flow in ducts. This control system is based on a passive inorganic acoustical coating. MPAC has developed and applied for a patent on a architectural acoustical control coating with unusually high wear resistance, a noise reduction coefficient of 0.5, and excellent low frequency damping. UMR has long experience in modeling acoustic treatment in ducts with high speed flow and has world class facilities for experimental characterization of acoustic materials and systems. The proposal team is committed to a phase one proof of concept deliverable consisting of passive coatings for application. This acoustic control coating, if successful, would provide a very low cost high reliability acoustical damping for hot gas structures.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Kennedy Space Center(KSC)	Lead Organization	NASA Center	Kennedy Space Center, Florida
Mabels Prototyping and Coffeeshop	Supporting Organization	Industry	Treasure Island, Florida

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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Kennedy Space Center (KSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Florida

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Floyd Roberts

Technology Areas

Primary:

- TX14 Thermal Management Systems
  - TX14.2 Thermal Control Components and Systems
    - TX14.2.3 Heat Rejection and Storage